RHODE ISLAND
STATE BUILDING CODE

National Building Code
Regulation SBC-1
April 1, 1998

Re-enactment of SBC-1
Dated May 1, 1997
Replaces Existing Regulation SBC-1
Dated January 1, 1992

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Administration
BUILDING CODE STANDARDS COMMITTEE
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7th EDITION

STATEMENT OF NEED

Pursuant to the State Building Code Chapter 23, Title 27.3, the Building Code Standards Committee has promulgated Regulation SBC-1, as amended, dated April 1, 1998. In accordance with section 23-27.3-109.1 paragraphs 1-4 of the Code, the Committee has the authority to adopt appropriate rules and regulations when necessary to maintain the State Building Code current with national model codes and standards.

CHAPTER 1

ADMINISTRATION

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National Building Code
Regulation SBC-1
April 1, 1998

The Building Code Standard Committee, in accordance with the rule making authority of Title 23, Chapter 23-27.3, Section 109.1, paragraph 1 through 4 inclusive, has formally adopted and promulgated as the Rhode Island Basic Building Code, the provisions of the BOCA National Building Code 1996 Edition, as published by the Building Officials and Code Administrators International, Inc. (BOCA), together with existing State Building Code amendments and the amendments thereto hereinafter set forth to the articles and sections of said code:

BOCA Chapter 1, Administration and enforcement is deleted in its entirety, and the provisions of Title 23, Chapter 27.3 of the General Laws of Rhode Island shall prevail.

CHAPTER 2
DEFINITIONS

The following Rhode Island Amendments are added to the list of BOCA section 202.0 General Definitions:

SECTION 202.0 GENERAL DEFINITIONS

Approved agency: An established and recognized agency regularly engaged in conducting tests or furnishing inspection services, when such agency has been approved by the Committee.

Approved material, equipment and methods: Material, equipment and methods evaluated and approved by the Committee.

Child Care: The supervision of children less than two and 1/2 years of age by other than their parent (s) or legal guardian (s) for less than 24 hours, per day.

Code Official: The building official or other designated authority charged with the administration and enforcement of this Code, or a duly authorized representative. Said authorities may include the plumbing, mechanical, and electrical inspectors (officials).

Commissioner: The State Building Commissioner, the building official responsible to enforce this Code in accordance with the provisions of section 23-27.3-108.2 of this Code.

Committee: The Building Code Standards Committee.

Day Care: The supervision of individuals more than 2 1/2 years of age by other than their parent (s) or legal guardian (s) for less than 24 hours per day.

Foster Care: The supervision of one or more persons of any age by their foster parent (s) for 24 hours per day.

Foster Parent: Shall mean a person or married couple who receives into his/her home for care or treatment one or more children unrelated to the care giver by blood marriage or adoption and who receives compensation for child care costs.

Housing for Elderly: A building or portion thereof containing dwelling units arranged or used for the independent living facilities or elderly individuals age 62 years or older. This includes but is not limited to all federal, state and locally funded projects.

Permit: An official document or certificate issued by the authority having jurisdiction which authorizes performance of a specified activity (see section 114.0)

Repair: The reconstruction or renewal of any part of an existing structure for the purpose of its maintenance
(see section 102.0)

CHAPTER 3
USE OR OCCUPANCY

The following Rhode Island amendments are added to the sections of Chapter 3:

Amend BOCA section 302.0 classification, by adding the following section:

302.3 No change of Use -Day Care/Child Care Facilities.

Existing single family dwellings licensed by the Department of Children Youth and Families for up to 8 children shall not be considered a change of Use Group E or Use Group I-2.

Amend BOCA 305.1.1 Day Care facilities as follows:

305.1.1 Day care facilities: A day care facility which provides care for more than eight (8) persons more than 2 1/2 years of age or less than 24 hours per day shall be classified as Use Group E.

Delete BOCA section 308.2 and Renumber Rhode Island 307.2 amendment as follows:

Amend section 308.2 as follows:

308.2 Use Group I-1: This use group shall include buildings or parts thereof housing nine (9) or more individuals who, because of age, mental disability or other reasons, must live in a supervised environment but who are physically capable of responding to an emergency situation without personal assistance. The following types of facilities when accommodating persons of the above description shall be classified as an I-1 facility; board and care facility, half-way house, group home, social rehabilitation facility, alcohol and drug center and convalescent facility. A facility such as the above with eight (8) or less occupants shall be classified as a residential use group, R-3 or R-4.

Delete BOCA section 308.3 and renumber Rhode Island amendment 307.3, Use Group I-2 as follows:

308.3 Use Group I-2: This use group shall include buildings or parts thereof used for medical, surgical psychiatric, nursing or custodial care on a 24 hour basis of nine (9) or more persons who are not capable of self-preservation. The following types of facilities, when accommodating persons of the above description, shall be classified as I-2 facilities: hospital, nursing home (intermediate care facility and skilled nursing facility), mental hospital, and detoxification facility. A facility such as the above eight (8) or less occupants shall be classified as a residential use group R-3 or R-4.

Amend BOCA section 310.5 by adding the following exception number 3:

310.5 Use Group R-3 structures: This use group shall include all buildings arranged for occupancy as one-or two-family dwelling units, including not more than five lodgers or boarders per family and multiple single-family dwellings where each unit has an independent means of egress and is separated by a 2-hour fire separation assembly (see Section 709.0).

Exceptions

1. In multiple single-family dwellings that are equipped throughout with an approved automatic sprinkler system installed in accordance with Section 906.2.1 or 906.2.2 the fire resistance rating of the dwelling unit separation shall not be less than 1 hour. Dwelling unit separation walls shall be constructed as fire partitions(see Section 711.0)
2. In multiple single-family dwellings that are equipped throughout with an approved automatic sprinkler system installed in accordance with Section 906.2.3, the fire resistance rating between each dwelling unit shall not be less than 1 hour and shall be constructed as a fire partition.
3. Multiple single family dwellings meeting the definition of "townhouse" as defined in One and Two Family Dwelling Code SBC-2. All such structures shall be designed in accordance with SBC-2 or the requirements of this code applicable to Use Group R-3.

CHAPTER 4
SPECIAL USE AND OCCUPANCY

The following Rhode Island amendments are added to the sections of CHAPTER 4:

Renumber Rhode Island amendment 600.3 as follows:

401.2 Fire Alarm Systems: The requirements herein prescribed for the design, operation and installation of fire alarm systems, communication systems, etc. shall be construed as supplemental to any applicable provisions of the Rhode Island State Fire Code.

Add new Rhode Island amendment section 401.3 as follows:

401.3 Fire Prevention Code: Any and all references to the BOCA National Fire Prevention Code shall be utilized only in the absence of direct provisions as may be contained in the Rhode Island Fire Safety Code.

Delete BOCA section 420.0 in its entirety and retain Rhode Island section 620.0 - renumber and edit as required.

SECTION 420.0 MANUFACTURED UNITS

420.1 GENERAL: Manufactured Units, as defined in section 202.0 shall be designed, constructed and maintained to be transported from one location to another and used with or without a permanent foundation.

420.2 CONSTRUCTION: Residential manufactured units shall be designed and constructed in accordance with the provisions of the Department of Housing and Urban Development's Manufactured Home Construction Standards. All non-residential manufactured units shall be designed and constructed in accordance with the provisions of this code and regulation SBC-6, dated April 1, 1998, Manufactured Buildings and Building Components, whether used with or without permanent foundation.

420.3 LOCATION: Manufactured units shall be located in spaces approved for such use. The provisions of this code shall not be construed to repeal, modify or constitute an alternative to any lawful zoning regulations. In case of conflict between this code or any other ordinances or statute, the most rigid requirements shall apply.

420.3.1 ANCHORAGE AND TIE-DOWN: Every parking space for manufactured units shall be provided with devices for anchoring the unit to prevent overturning or uplift. The owner of the parking spaces shall anchor or cause to be anchored all manufactured units located on the parking space. The anchorage shall be adequate to withstand wind forces and uplift as required by regulation SBC-7 , dated April 1, 1998, entitled Manufactured Home Installation.

CHAPTER 5
GENERAL BUILDING LIMITATIONS

The following Rhode Island amendments are added to the sections of Chapter 5.

Add Section 501.2, Fire Limits, to read as follows:

501.2 Fire Limits: For the purpose of control of use and construction of buildings to prevent conflagration from fire, three (3) municipalities have established limiting districts designated "fire limits" and "outside fire limits" - Providence, Newport and Westerly. These municipalities have promulgated regulations governing the fire limits and submitted them to the Committee for approval. The regulations are on file at the State Building Commission and the local building department.

All other existing fire limit requirements shall stay in effect until superseded, but no later than January 1, 1987.

The fire limits shall comprise the areas containing congested business, commercial, manufacturing and industrial uses or in which such uses are developing. These three (3) communities, in accordance with section 101.3 and 108.1.6 may enact ordinances defining the areas to be designated as within the fire limits and said communities may amend such ordinances regarding designated areas at any time. Copies of such designated areas shall be submitted to the Committee for inclusion in this Code preceding this article.

Newport Fire Limits: The fire limits shall comprise the areas containing congested business, commercial, manufacturing and industrial uses for in which such uses are developing. The limits of such areas are described as all those areas designated by the City of Newport Zoning Map as general business (GB), waterfront business (WB), and limited business (LB) areas.

Providence Fire Limits: Area One begins at a point at the intersection of the center of Broadway and Dean Street, thence going southwesterly on Dean Street to West Street.

Thence: Southwesterly on West Street to Cargill St.
" southeasterly on Cargill St. to Fountain St
" westerly on Fountain Street to Battey Street
" southerly on Battey Street to Westminster St.
" easterly on Westminister Street to Interstate
" Route 95
" southeasterly on I-95 to Broad Street
" southwesterly on Broad Street to Pearl Street
" northwesterly on Pearl Street to Perkins St.
" southwesterly on Perkins Street to A Street
" southeasterly on A Street to Booth Street
" southwesterly on Booth St. to its intersection with the southerly property line of lot 89,on A.P. as assessed on 12-31-83.
Thence: southeasterly along the southerly property Line of lot 89 to Central Street
Thence: southeasterly along Central St. to Broad St.
" northeasterly on Broad St. to Lockwood St.
" southeasterly on Lockwood St. to Pine St.
" northeasterly on Pine St. to Interstate Rt.95
" southeasterly on Interstate Rt. 95 to Plain St.
" southerly on Plain Street to Bordon Street
" easterly on Bordon Street to Crary Street
" southeasterly on Crary Street to Eddy Street
" southerly on Eddy Street to Carolina Avenue
" easterly on Carolina Ave. to Narragansett Blvd.
" northerly on Narragansett Blvd To Chapman St.
" easterly on Chapman Street to westerly boundary line of the shipyard as shown on A.P. 56, as assessed 12-31-83
Thence: southerly along the westerly boundary line of The shipyard as shown on A.P. 56 to the Cranston City line
Thence: easterly along the Cranston city line to the East Providence City line
Thence: northerly along the East Providence city line to its intersection with the southerly extension of the center line of Traverse St. at India Point
Thence: northwesterly along the center line of Traverse St. to the southerly boundary line of Interstate Route 195
Thence: northwesterly on Interstate Route 95 to South Water Street
Thence: northwesterly on south Water Street to Crawford Street
" northeasterly on Crawford Street to South Main Stree northerly in part along South Main Street and in part along North Main Street to Smith Street

Thence: westerly on Smith Street to Francis Street
" southerly on Francis Street to Brownell St.
" westerly on Brownell St. to Holden St.
" northerly on Holden St. to West Park St.
" northwesterly and westerly to West Park St. to Valley St.
" continuing westerly and southwesterly on Valley to the Woonasquatucket River
" westerly and southerly along the Woonasquatucket River to Delaine Street
Thence: southwesterly on Delaine St. to Manton Avenue
Thence: southwesterly on Manton Avenue to Hillard St.
" southwesterly and northwesterly on Hillard St. to Pelham St.
" westerly on Pelham Street to Curtis Street
" northwesterly on Curtis Street to Bosworth St.
" southwesterly on Bosworth Street to Route 6
" southeasterly on Route 6 to its intersection with the extension of Magnolia Street
Thence: southwesterly on Magnolia Street to Huldah St.
Southeasterly on Huldah St. to Sterling Avenue
Easterly on Sterling Avenue to Atwood Avenue
Southerly on Atwood Avenue to Union Avenue
Easterly on Union Avenue to Route 10
Northerly and northeasterly in part along Route 10 and in part along Route 6 to Dean St
Thence: southeasterly on Dean Street to Cedar Street
Easterly on Cedar Street to Bradford Street
Southerly on Bradford Street to Broadway
Westerly on Broadway to Dean Street at said place of beginning.

AREA TWO

Area two begins at the intersection of the center of
Elmwood Avenue and Earl Street.

Thence: westerly on Earl Street to the property now or formally of N.Y.N.H. and Hartford Railroad
Thence: northwesterly along its westerly boundary to its intersection with the northerly boundary of lot 170, on A.P. 51, assessed 12/31/83
Thence: westerly, southwesterly and southerly along the boundary line of lot 170 to its intersection with Adelaide Avenue
Thence: easterly along Adelaide Avenue to Downing St.
Southerly along Downing St. to Reservoir Ave.
Thence: southerly along Narragansett Avenue to Roger Williams Avenue, easterly along Roger Williams Avenue to property now or formerly of the N.Y.N.H. and Hartford Railroad

Thence: northeasterly along the easterly boundary of property now or formerly of the N.Y.N.H. and Hartford Railroad to its intersection with Russell Street.

Thence: easterly along Russell Street to Elmwood Avenue northwesterly along Elmwood Avenue to the Place of beginning.

Westerly Fire Limits: The limits shall comprise the areas containing congested business, commercial, manufacturing, and industrial uses or in which such uses are developing. The limits of such areas shall be described in the Zoning Ordinance or as delineated on the official zoning map of the Town of Westerly, as B1, B2, M1 and M2.

CHAPTER 7
FIRERESISTANT MATERIALS AND CONSTRUCTION

The following Rhode Island amendments are made to the Sections of Chapter 7.

Amend BOCA Section 704.1.1 by adding renumbered Rhode Island amendment 902.1.2.1, Untested Assemblies, as follows:

704.1.1 Fire resistance ratings: The fire resistance ratings of building assemblies and structural elements shall be determined in accordance with the test procedures set forth in ASTM E119 listed in Chapter 35, specific methods as provided for herein, or shall be determined in accordance with an approved analytical method. Where materials, systems or devices are incorporated into the assembly which have not been tested as part of the assembly, sufficient data shall be made available to the code official to show that the required fire resistance rating is not reduced. Materials and methods of construction used to protect joints and penetrations in fire resistance rated assemblies shall not reduce the required fire resistance rating. Where an approved analytical method is utilized to establish the fire resistance rating of a structural element or building assembly, the calculations shall be based upon the fire exposure and acceptance criteria specified in ASTM E119 listed in Chapter 35.

704.1.1.2 Untested assemblies: Other nationally recognized calculation methods to determine fire resistance rating equivalency may be accepted providing the method used has been approved by the Commissioner. Such methods shall be used only when no other method exists to establish the fire resistance rating of an assembly. The Commissioner shall be notified of each such time this provision is used.

Exception: In determining the fire resistance rating of exterior load bearing walls, compliance with the ASTM E119 criteria for unexposed surface temperature rise and ignition of cotton waste due to passage of flame or hot gases, is required only for a period of time corresponding to the required fire resistance rating of an exterior non-load bearing wall with the same fire separation distance, and in a building of the same use group. Where the fire resistance rating determined in accordance with this exception exceeds the fire resistance rating determined in accordance with ASTM E119 listed in Chapter 35, the fire exposure time period, water pressure and application duration criteria for the hose stream test of ASTM E119 listed in Chapter 35, shall be based upon the fire resistance rating determined in accordance with this exception.

CHAPTER 8
INTERIOR FINISHES

The following Rhode Island amendments are made to the Sections of Chapter 8.

Add the following Rhode Island amendment to BOCA Section Decorative Material Restriction, as follows:

807.1 Decorative material restrictions: In occupancies in Use Groups A, E, I-2, I-3 and R-1, all curtains, draperies, hangings and other decorative materials suspended from walls or ceilings shall be noncombustible or be maintained flame resistant in accordance with Section 807.2 as herein specified.

In addition all draperies, hangings and other decorative materials shall be regulated by the appropriate chapters of the State Fire Code.

807.1.1 Noncombustible: The permissible amount of noncombustible decorative hangings shall not be limited.

807.1.2 Flame resistant: The permissible amount of flame-resistant decorative hangings shall not exceed 10 percent of the total wall and ceiling area.

CHAPTER 9
FIRE PROTECTION SYSTEMS

The following Rhode Island amendments are made to the sections of Chapter 9.

Amend BOCA 901.1 Scope by adding the following sentence:

901.1 Scope: The provisions of this chapter shall specify where fire protection systems are required and shall apply to the design, installation, maintenance and operation of all fire protection systems in all buildings and structures.

Provisions governing where fire protection systems are required are also contained in the Rhode Island State Fire Safety Code. The most restrictive provisions of each code shall apply.

Amend BOCA 904.1 by creating exception #3

904.1 Where required: Automatic fire suppression systems shall be installed where required by this code, and in the locations indicated in Sections 904.2 through 904.11.

Exceptions

1. An automatic fire suppression system shall not be required in portions of buildings that comply with Section 406.0 for open parking structures.
2. In telecommunications equipment buildings, an automatic fire suppression system shall not be required in those spaces or areas occupied exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries and standby engines, provided that those spaces or areas are equipped throughout with an automatic fire detection system in accordance with Section 919.0 and are separated from the remainder of the building with fire separation assemblies consisting of 1 -hour fire resistance rated walls and 2-hour fire resistance rated floor/ceiling assemblies.
3. Provisions governing where fire protection systems are required are also contained in the Rhode Island State Fire Safety Code. The most restrictive provisions of each code shall apply.

Delete BOCA Section 904.8 and renumber Rhode Island Section 1002.8 as follows:

904.8 Use Group R-1: An automatic fire suppression system shall be provided throughout all buildings with a Use Group R-1 fire area in accordance with Section 906.2.1 or 906.2.2.

Delete BOCA Section 904.9 and renumber Rhode Island Section 1002.9 as follows:

1002.9 Use Group R-2: An automatic fire suppression system shall be provided throughout all buildings and structures, or portions thereof, of Use Group R-2 in accordance with Section 906.2.1 or 906.2.2.

Exceptions:

1. Buildings three (3) stories or less in height above basement; or

2. Buildings that contain six (6) or less living units between fire walls.

Delete BOCA Section 906.2.3, NFPA 13D Systems, exception #2 as follows:

906.2.3 NFPA 13D Systems: In Use Group R-3 fire areas with at least 1-hour fire resistance rated fire separation assemblies between dwelling units, or in Use Group I-1 fire areas in buildings with not more than eight occupants, systems designed and installed in accordance with NFPA 13D listed in Chapter 35 shall be permitted.

Exceptions

1. Sprinklers shall not be required in bathrooms that do not exceed 55 feet (5.12 m^2) in area.

Delete BOCA 906.5, Sprinkler Alarms, exceptions #1 and #2 as follows:

906.5 Sprinkler Alarms: Approved audible or visual alarm devices shall be connected to every water sprinkler system. Such alarm devices shall be activated by water flow and shall be located in an approved location on the exterior of the building and an additional audible or visual alarm device shall be installed within the building.

Delete BOCA 1990 Sections 917.0, 918.0, 919.0, and 920.0 and 923.0 and renumber the following Rhode Island Amendments:

917.0 Fire Protection Signaling Systems: Signaling Systems shall be installed in accordance with the State Fire Safety Code, Title 23-28.1 of the General Laws. The authority having jurisdiction as defined in the State Fire Safety Code shall be the administrative authority on such systems.

918.0 Automatic Fire Detection System: Automatic Fire Detection Systems shall be installed in accordance with the State Fire Safety Code, Title 23-28.1 of the General Laws. The authority having jurisdiction as defined in the State Fire Safety Code shall be the administrative authority on such systems.

919.0 Single and Multiple Station Smoke Detectors: Single and multiple station smoke detector systems shall be installed in accordance with the State Fire Safety Code, Title 23-28.1 of the General Laws. The authority having jurisdiction as defined in the State Fire Safety Code shall be the administrative authority on such systems.

920.0 Fire Extinguishers: All fire extinguishers shall comply with the provisions of the State Fire Safety Code, Title 23-28.1 of the General Laws. The authority having jurisdiction as defined in the State Fire Safety Code shall be the administrative authority on such portable fire extinguisher installations.

923.0 Supervision: All automatic fire suppression systems shall be supervised as required by the State Fire Safety Code, Title 23-28.1 of the General Laws. The authority having jurisdiction as defined in the State Fire Safety Code shall be the administrative authority on such systems.

CHAPTER 10
MEANS OF EGRESS

The following Rhode Island amendments are made to the sections of Chapter 10:

Delete BOCA Section 1005.6, Open Sided Walking Areas, exceptions and substitute the following Rhode Island exception:

1005.6 Elevation change: Where changes in elevation exist in the means of egress, ramps complying with Section 1016.0 shall be used where the difference in elevation is less than 12 inches (305 mm). The ramp shall be equipped either with handrails or with floor finish materials that contrast with adjacent floor finish materials.

Exception: At exterior doors not required for physically handicapped and aged persons by Section 512.0, a maximum step down of 8 inches (203 mm) shall be permitted.

Amend BOCA 1017.4.1 exception 6 by adding the following language after 6.3.

1017.4.1 Locks and latches: All means of egress doors shall be readily opened from the side from which egress is to be made without the use of a key or special knowledge or effort.

Exceptions

1. Key operation shall be permitted from a dwelling unit provided that the key cannot be removed from the lock when the door is locked from the side from which egress is to be made.

2. Locking devices conforming to Section 409.3.2 shall be permitted in occupancies in Use group I-2.

3. Locks conforming to Section 410.4 shall be permitted in occupancies in Use Group I-3.

4. Means of egress doors from individual dwelling units and guestrooms of occupancies in Use Group R having an occupant load of 10 or less shall be permitted to be equipped with a night latch, dead bolt or security chain, provided that such devices are opened from the inside without the use of a key or tool and are mounted at a height not to exceed 48 inches (1219 mm) above the finished floor.

5. Special locking arrangements conforming to Section 1017.4.1.2 or Section 1017.4.1.3.

6. In occupancies in Use Groups B, F, M and S, the main exterior means of egress door is permitted to be equipped with a key-operated locking device from the egress side where in compliance with the following three conditions:

6.1. The locking device is of a type that is readily distinguishable as locked.

6.2. A readily visible, durable sign is posted on the egress side on or adjacent to the door stating "This Door To Remain Unlocked When This Building Is Occupied." The sign shall be in letters not less than 1 inch (25 mm) high on a contrasting background.

6.3 The main exterior door is a single door or a pair of doors which, when unlocked, the door or both leafs of a pair of doors swing free.

The Building Official may revoke permission to utilize this exception number 6, when, in the opinion of the official, an increased danger to life safety exists because of a particular use or occupancy.

Amend BOCA Section 1017.4.2, Panic Hardware as follows:

1017.4.2 Panic Hardware: All doors equipped with latching devices in occupancies in Use groups A and E or portions of buildings occupied for assembly or educational purposes and serving rooms or spaces with an occupant load greater than 100, shall be equipped with approved panic hardware. Acceptable panic hardware shall be a door latching assembly incorporating a device which causes the door latch to release and the leaf to open when a force of 15 pounds (66 N) is applied in the direction of egress to a bar or panel, the activating portion of which extends not less than one-half of the width of the door leaf, and is applied at a height greater than 30 inches (762 mm) but less than 44 inches (1118 mm) above the floor. The force shall be applied at the lock side of the door or 30 inches (762 mm) from the hinged side, which ever is farther from the hinge. Where fire door assemblies are required to have panic hardware, approved fire exit hardware shall be used.

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1017.4.2.1 Electrical Equipment Rooms: Doors on all rooms that contain electrical equipment rated over 800 amps shall be equipped with locks. Personnel doors shall swing out and be equipped with panic bars, pressure plates, or other devices that are normally latched but open under simple pressure.

CHAPTER 11
ACCESSIBILITY

Delete BOCA Chapter 11 in its entirety and use the provisions of Regulations SBC-14, 15, 16 and 17 for design and accessible construction.

CHAPTER 12
INTERIOR ENVIRONMENT

The following Rhode Island amendments are made to the sections of Chapter 12:

Renumber Rhode Island Section 703.0, Light and Ventilation Required, as follows:

1206.4 Basement or cellar windows: Except as may be otherwise provided for habitable or occupied rooms at least two (2) operable windows 12" X 32" nominal size shall be installed. Security devices shall not unreasonably impede the use of this window for light, ventilation or fire-fighting purposes.

CHAPTER 14
EXTERIOR WALL COVERINGS

The following Rhode Island amendments are made to the sections of Chapter 14:

Amend Table 1405.3 as follows:

Table 1405.3
MINIMUM THICKNESS OF WEATHER COVERINGS

Covering type	Minimum thickness
Aluminum siding	0.019 inch
Brick and concrete masonry veneers	2 inches
Ceramic veneer (architectural terra cotta, anchored type)	1 inch
Clay tile (flat slab)	1/4 to 1 inch
Clay tile (structural)	1 3/4 inches
Exterior plywood (with sheathing)	5/16 inch
Exterior plywood (without sheathing)	See section 2307.0
Glass-fiber reinforced concrete panels	3/8 inch
Hardboard siding	1/4 inch
Marble slabs	1 inch
Particleboard (with sheathing)	see Section 2308.5
Particleboard (without sheathing)	see Section 2308.5
Precast stone facing	5/8 inch
Protected fiberboard siding	1/2 inch
Rigid PVC siding	0.035 inch
Steel (approved corrosion-resistant)	0.017 inch
Stone (cast artificial)	1 1/2 inches
Stone (natural)	2 inches
Structural glass	11/32 inch
Stucco or exterior Portland cement plaster	
three-coat work over:	
metal plaster base	7/8 inch[b]
unit masonry	5/8 inch[b]
cast-in-place or precast concrete	5/8 inch[b]
two-coat work over:	
unit masonry	1/2 inch[b]
cast-in-place or precast concrete	3/8 inch[b]
Wood shingles	3/8 inch
Wood shingles (without sheathing)[a]	1/2 inch

Note a. For wood siding of a lesser thickness, see Section 1405.3.5.
Note b. Exclusive of texture.
Note c. 1 inch = 25.4 mm.

Renumber Rhode Island Section 2103.3.1.1, Residing Exterior Walls, as follows and insert in the Performance Requirements:

Section 1403.8 Residing Exterior Walls:
Materials and methods of application used for recovering or replacing an existing wall covering shall comply with the requirements of Sections 2103.3.1 through 2103.7.5. New Exterior side wall covering shall not be installed without first removing existing wall coverings when any of the following conditions occur:

1. When the existing wall or wall covering is water soaked or has deteriorated to the point that the existing wall or wall covering is not acceptable as a base for additional covering.
2. When the existing wall covering is asbestos cement board or asbestos-cement shingles.
3. When the existing wall covering has two or more applications of any type of wall covering.

Delete Rhode Island amendment 926.4, but relocate and renumber exceptions 2, 3 and 4 to BOCA section 1406.4. Delete BOCA exception No.2.

1406.4 Balconies and similar appendages: All balconies, porches, decks and supplemental exterior stairways attached to or supported by buildings of Types 1 and 2 construction shall be constructed of approved noncombustible materials. Such appendages attached to or supported by buildings of Types 3, 4 and 5 construction shall be of either noncombustible or combustible construction. Such appendages of combustible construction, other than fire retardant-treated wood, shall afford the fire resistance rating required by Table 602 for floor construction or shall be of Type 4 construction as described in Section 2304.0 and the aggregate length shall not exceed 50 percent of the building perimeter on each floor.

Exceptions

1. Untreated wood is permitted for pickets and rails, or similar guardrail devices which are limited to 42 inches (1067 mm) in height.
2. Balconies and similar appendages on buildings of Types 3, 4 and 5 construction shall be permitted to be of Type 5 construction.
3. Construction Types 3A and 5A are not required to meet the provisions of this section.
4. If the balcony is subject to deterioration as specified in section 2311.6, the provisions of 1702.6.6 shall prevail in lieu of this section's fire resistance requirements for Types 3, 4 and 5 construction.

CHAPTER 16
STRUCTURAL LOADS

The following Rhode Island amendments are made to the sections of Chapter 16:

Retain Rhode Island Section 1111.4, but add it as exception #2 to Section 1608.4:

1608.4 Flat-roof and low-slope snow loads: The snow load on unobstructed flat roofs and roofs having a slope of 30 degrees (0.2 rad) or less (P_f) shall be calculated in pounds per square foot using the following formula:

$$P_f = C_e I P_g$$

where:
C_e = Snow exposure factor determined from Table 1608.4.
I = Snow load importance factor determined from Table 1609.5.
P_g = Ground snow load expressed in pounds per square foot, determined from Figures 1608.3(1), 1608.3(2) or 1608.3(3).

Exception:

1. The flat-roof snow load on continuously heated greenhouses shall be calculated utilizing the following formula:

$$P_f = C_{1g} C_e I P_g$$

where the thermal factor for greenhouses (C_{1g}) = 0.83.

2. **Flat-roof snow loads:** Roof structures of unusual design shall be subject to roof snow drift surcharge criteria for those R-3 and R-4 residential structures subject to the provisions of 23-27.3-113.7, Engineering Details.

Revise Rhode Island Table 1111.2A and renumber as follows:

TABLE 1608.3 BASIC DESIGN CRITERIA FACTORS

AREA	SNOW LOAD (Pg)	WIND SPEED	FROST DEPTH (BELOW FINISH GRADE)
Zone 1	30 PSF	90 MPH	4'-6"*
Zone 2	30 PSF	90 MPH	4'-0"*
Zone 3	30 PSF	90 MPH	3'-4"
Zone 4	30 PSF	90 MPH	2'-6"

*** Always use residential design R-3 and R-4 of 3'-4".**

Renumber Rhode Island Section 1111.7 as follows:

1608.7 Drifting and Sliding Snow: Roofs and decks subject to sliding and/or drifting snow shall be designed in accordance with the following tables and diagrams:

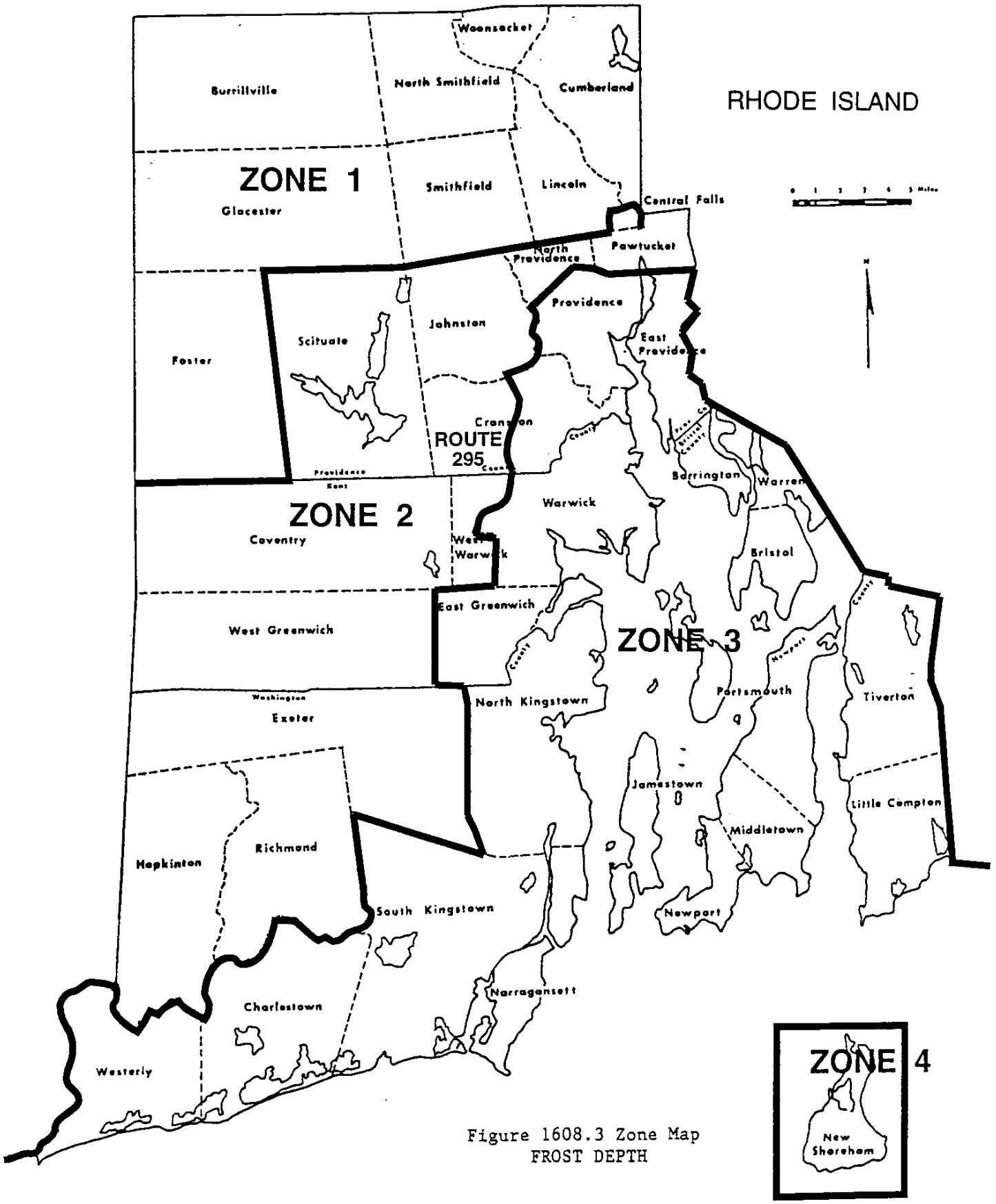
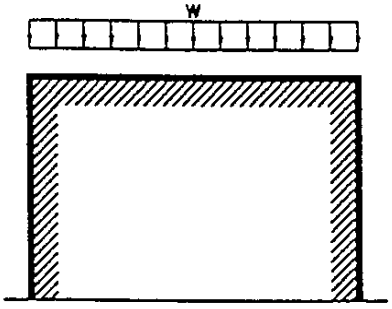


Figure 1608.3 Zone Map
FROST DEPTH

FIGURE (1)
DESIGN SNOW LOAD AND DISTRIBUTION, CONDITION I



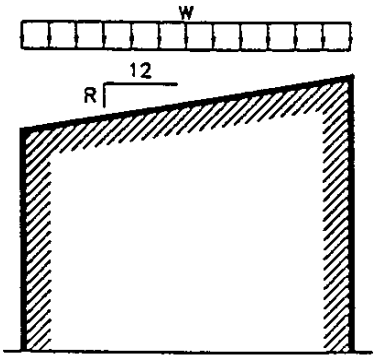
(a)

TABLE (1.a)

DESIGN SNOW LOAD (W) (PSF)
ZONES 1–4
30

NOTES:
1. (W) = FLAT-ROOF BASIC SNOW LOAD

SIMPLE FLAT ROOFS



(b)

TABLE (1.b)

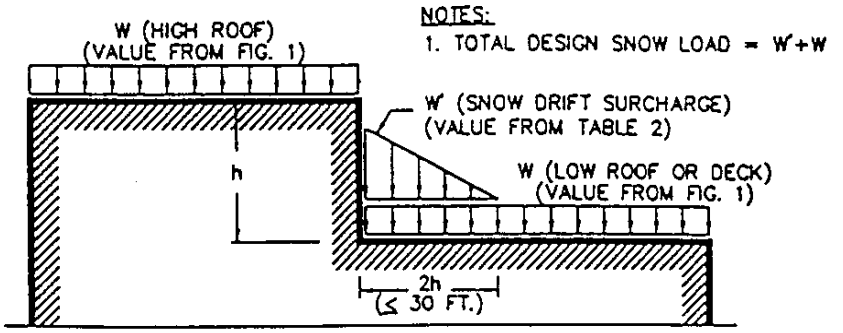
DESIGN SNOW LOAD (W) (PSF)	
R (°)	ZONES 1–4
0 TO 7	30
7 TO 10	24
10 TO 14	18
14 TO 21	12
> 21	0

NOTES:
1. (°) – ROOF PITCH = R:12
2. (W) = FLAT-ROOF BASIC SNOW LOAD
3. FOR MINIMUM LIVE LOAD REFER TO TABLE 1110.2

SHED ROOFS

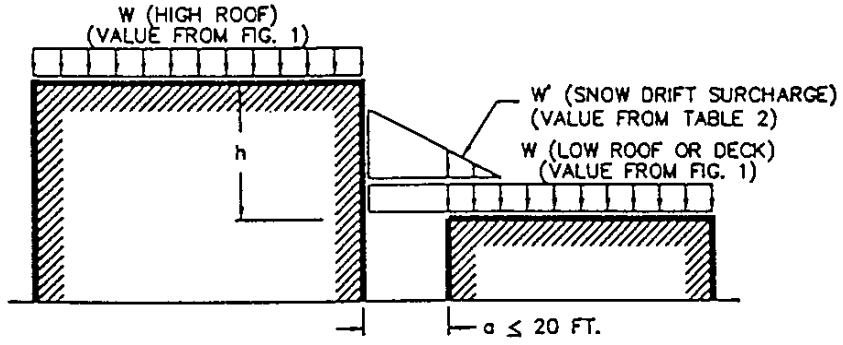
(NOTE: FOR HIP AND GABLE ROOFS USE TABLE (1.b) IN CONJUNCTION WITH SECTION 1111.6.1)

FIGURE (2)
DESIGN SNOW LOAD AND DISTRIBUTION, CONDITION II



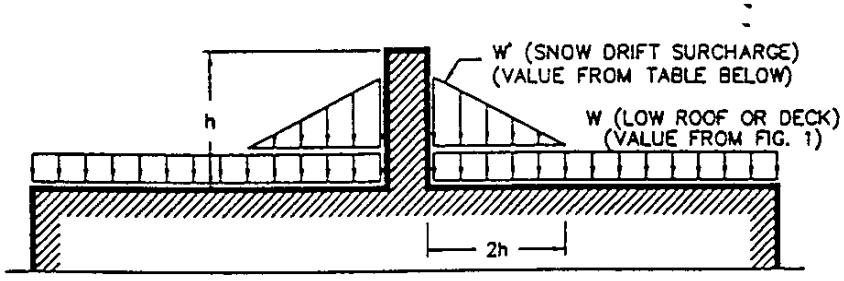
(a)

DRIFTING SNOW ON LOW ROOFS AND DECKS



(b)

DRIFT SNOW ONTO ADJACENT LOW STRUCTURES



(c)

SNOW DRIFTING AT ROOF PROJECTIONS

(NOTE: USE FIG. 2c IN CONJUNCTION WITH SECTION 1111.7.3)

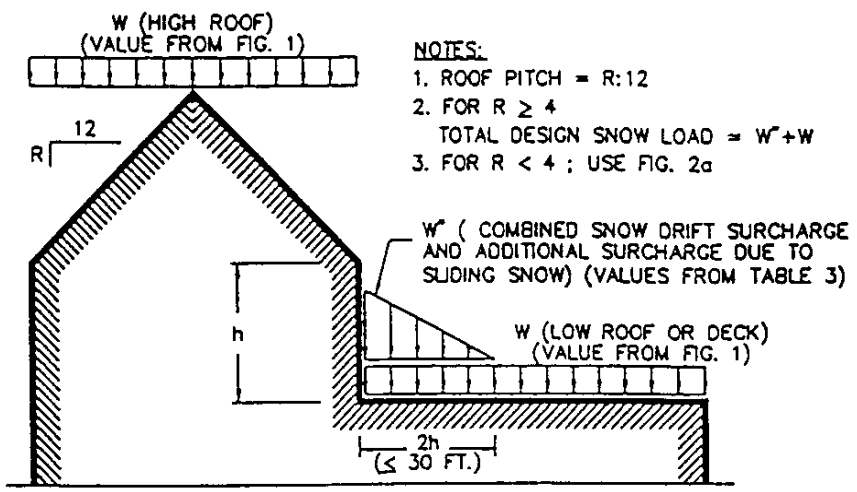
FIGURE (2) CONT.,
DESIGN SNOW LOAD AND DISTRIBUTION, CONDITION II

TABLE (2)

SNOW DRIFT SURCHARGE (W') (PSF)	
h (FT.)	ZONES 1–4
0.0 TO 2.0	0
> 2.0 TO 2.5	8
> 2.5 TO 3.0	15
> 3.0 TO 3.5	23
> 3.5 TO 4.0	30
> 4.0 TO 4.5	40
> 4.5 TO 5.0	45
> 5.0	60

NOTES:
1. (W') = MAXIMUM INTENSITY OF THE SNOW DRIFT SURCHARGE

FIGURE (3)
DESIGN SNOW LOAD AND DISTRIBUTION INCLUDING ADDITIONAL LOAD DUE TO SLIDING SNOW, CONDITION III



NOTES:
1. ROOF PITCH = R:12
2. FOR R ≥ 4
   TOTAL DESIGN SNOW LOAD = W"+W
3. FOR R < 4 ; USE FIG. 2a

(a)

ADDITIONAL SURCHARGE DUE DRIFTING AND SLIDING SNOW

TABLE (3)

SNOW DRIFT SURCHARGE & SURCHARGE DUE TO SLIDING SNOW (W") (PSF)	
h (FT.)	ZONES 1–4
0.0 TO 2.0	0
> 2.0 TO 2.5	12
> 2.5 TO 3.0	21
> 3.0 TO 3.5	33
> 3.5 TO 4.0	42
> 4.0 TO 4.5	66
> 4.5 TO 5.0	63
> 5.0	84

NOTES:
1. (W") = MAXIMUM INTENSITY OF SURCHARGE DUE TO DRIFTING AND SLIDING SNOW

FIGURE (4)
VALLEY DESIGN SNOW LOAD AND DISTRIBUTION,
CONDITION IV

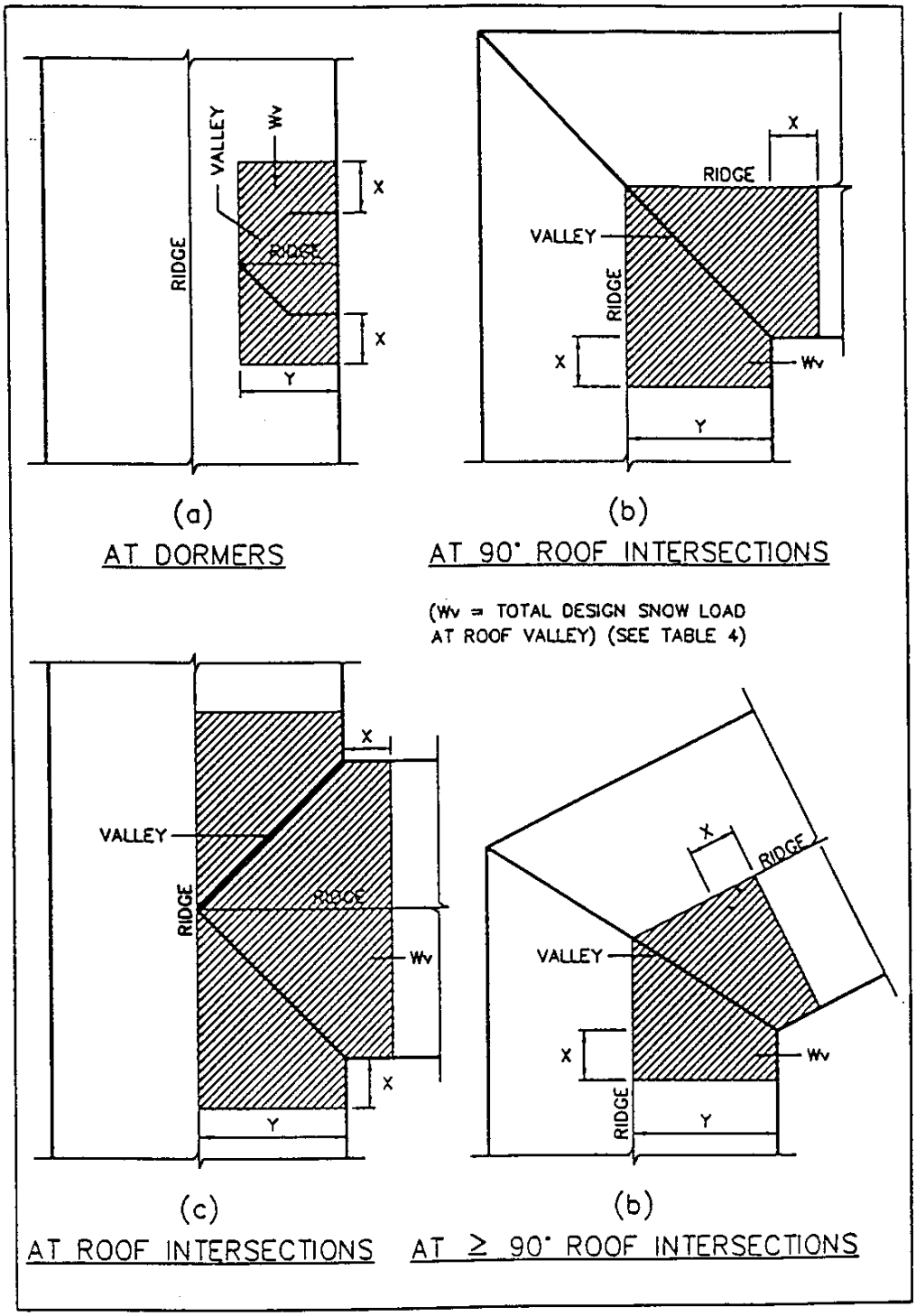


FIGURE (4) CONT.
VALLEY DESIGN SNOW LOAD AND DISTRIBUTION,
CONDITION IV

TABLE (4)

VALLEY DESIGN SNOW LOAD (Wv) (PSF)	
R (°)	ZONES 1–4
0 TO 7	60
7 TO 10	48
10 TO 14	36
14 TO 21	24
> 21	0

NOTES:
1. (°) – ROOF PITCH = R:12 (USE LEAST PITCH)
2. X = 5.0 FT. BUT NEED NOT EXCEED Y/2

Amend BOCA Section 1610.1 as follows:

SECTION 1610.0 EARTHQUAKE LOADS

1610.1 General: Every building and structure shall be designed and constructed to resist the ultimate strength loads and story drift effects of earthquake motions determined in accordance with this section, or shall comply with Section 9 of ASCE 7 listed in Chapter 35. Additions and changes of occupancy to existing buildings and structures shall be designed and constructed to resist the effects of earthquake motions determined in accordance with this section. Special structures, including but not limited to vehicular bridges, transmission towers, industrial towers and equipment, piers and wharves, and hydraulic structures, shall be designed for earthquake loads utilizing an approved, substantiated analysis.

Exceptions:

1. Detached one- and two-family dwellings of Use Groups R-3 and R-4.

2. Agricultural storage buildings which are intended only for incidental human occupancy are exempt from the requirements of this section.

3. The seismic force-resisting system of wood frame buildings that conform to the provisions of Section 2305.8 and are constructed in accordance with Section 2305.0 and Section 1610.3.6.1 are not required to be analyzed as specified in Sections 1610.3 through 1610.5.

Delete BOCA Section 1610.13 in its entirety and substitute the following:

1610.1.3 Seismic ground acceleration value:
The effective peak velocity-related acceleration (A_v) and the effective peak acceleration (A_a) shall be 0.12 for the entire state and its communities.

Amend Table 1610.1.5 by adding the Rhode Island number 8 to Group III Seismic Hazard Exposure Group:

Table 1610.1.5
SEISMIC HAZARD EXPOSURE GROUP

Seismic Hazard Exposure Group Type and Description	Nature of Occupancy
Group 1	All occupancies except those listed below
Group II Seismic Hazard Exposure Group II buildings are those which have a substantial public hazard due to occupancy or use, including buildings containing any one or more of the indicated occupancies.	1. Use Group A in which more than 300 people area. 2. Use Group E with an occupant load greater than 250 3. Use Group B used for college or adult education with an occupant load greater than 500. 4. Use Group I-2 with an occupant load greater than 50, not having surgery or emergency treatment facilities. 5. Use Group I-3. 6. Power-generating stations and other public utility facilities not included in Seismic Hazard Exposure Group III. 7. Any other occupancy with an occupant load greater than 5,000.

Table 1610.1.5
SEISMIC HAZARD EXPOSURE GROUP CONTINUED

Group III Seismic Hazard Exposure Group III buildings are those having essential facilities which are required for post-earthquake recovery, including buildings containing any one or more of the indicated occupancies.	1. Fire, rescue and police stations. 2. Use Group I-2 having surgery or emergency treatment facilities 3. Emergency preparedness centers. 4. Post-earthquake recovery vehicle garages. 5. Power-generating stations and other utilities required as emergency backup facilities. 6. Primary communication facilities. 7. Highly toxic materials as defined by Section 307.0 where the quantity of the material exceeds the exempt amounts of Section 307.8. 8. Cafeterias, gymnasiums and other multi-purpose assembly type rooms with an occupant load greater than 250 in Use Group E.

Delete BOCA figures 1610.1.3 (1) and 1610.1.3 (2).

CHAPTER 17
STRUCTURAL TESTS AND INSPECTIONS

The following Rhode Island amendments are made to the sections of Chapter 17:

Add the following to section 1701.2:

The provisions of this article shall govern the quality, workmanship, and requirements for all materials and methods and the minimum specifications for enclosure wall thickness hereafter used in the construction of buildings and structures. All materials and methods of construction shall conform to the approved rules and the standards for materials and tests and the requirements of accepted engineering practice as herein listed. The Committee shall be the approval agency in lieu of the building official as specified in the provisions of this article in order to maintain statewide uniformity and acceptance of new or innovative materials and methods of construction in accordance with section 23-27.3-127.1 of this Code and Regulation SBC-12 dated April 1, 1988, for New Materials, Devices or Methods of Construction.

Delete BOCA exceptions 1,2, and 3 to section 1705.1 , general , and substitute the following:

SECTION 1705.0 SPECIAL INSPECTIONS

1705.1 General: The permit applicant shall provide special inspections where application is made for construction as described in this section. The special inspectors shall be provided by the permit applicant and shall be qualified and approved for the inspection of the work described herein.

Exceptions

1. Special inspections shall only be required for:

a) Buildings of Seismic Hazard Group III as defined in Table 1612.1.5
b) Hi-rise structures as defined in section 403.0.
c) Wood trusses in all use groups except R-3 and R-4 use groups.
d) Buildings and structural components utilizing sprayed cementations and mineral fiber fires resistive materials (see Section 1705.12).

CHAPTER 18
FOUNDATIONS AND RETAINING WALLS

The following Rhode Island amendment is added to the section of Chapter 18:

Amend BOCA section 1820.2.2 Dimensions, by adding thereto exception No. 2:

1820.2.2 Dimensions: The pile length shall not exceed 30 times the average diameter. The minimum diameter shall be 12 inches (305 mm).

Exception:

1. The length of the pile shall be permitted to exceed 30 times the diameter, provided that the design and installation of the pile foundation is under the direct supervision of a registered design professional knowledgeable in the field of soil mechanics and pile foundations. The registered design professional shall certify to the code official that the piles were installed in compliance with the approved design.

2.The minimum diameter shall be permitted to be less than of 12” when provisions are made for special inspectional devices to be lowered into the augured hole for inspection purposes.

CHAPTER 19
CONCRETE

The following Rhode Island amendment is added to the Sections of Chapter 19:

Delete BOCA exceptions 3 and 5 and renumber accordingly.

1905.1 General: The thickness of concrete floor slabs supported directly on the ground shall not be less than 3 1/2 inches (89mm). A-6mil (0.006 inch:152mm) polyethylene vapor retardant with joints lapped not less than 6 inches (152 mm) shall be placed between the base course or sub grade and the concrete floor slab, or other approved equivalent methods of materials shall be used to retard vapor transmission through the floor slab.

Exception: A vapor retardant is not required:

1. For detached structures accessory to occupancies in Use Group R-3, such as garages, utility buildings or other unheated facilities:

2. For unheated storage rooms having an area of less than 70 square feet (6.5 m^2) and carports attached to occupancies in Use Group R-3:

3. For driveways, walks, patios and other flatwork which will not be enclosed at a later date: or

CHAPTER 21
MASONRY

The following Rhode Island amendment is added to the sections of chapter 21:

Add the following Rhode Island amendment section 2112.4, Ties, to section 2112.0, miscellaneous requirements :

2112.4 Ties: corrugated wall ties are banned on masonry veneers exceeding 10' in height.

CHAPTER 23
WOOD

The following Rhode Island amendments are to the sections of Chapter 23:

Amend BOCA 2305.15 by adding the following Rhode Island amendments:

2305.15 Roof spans: Design stresses of rafters shall be determined in accordance with AFPA NDS listed in Chapter 35 and shall be braced in accordance with Section 2305.16. Metal-plate-connected roof trusses shall be designed in accordance with TPI 1 and AFPA NDS listed in chapter 35, and shall be braced to prevent rotation and provide lateral stability.

2305.15.1 Roof decking and sheathing: Roof deck sheathing shall consist of not less than 5/8-inch boards, wood structural panel of the thickness specified in Section 2307.3, or other approved materials of equivalent strength and rigidity. Where open deck sheathing is used on pitched roofs, such sheathing shall consist of not less than 1-inch by 4-inch roofers spaced not more than 6 inches (152 mm) on center, or of material of equivalent strength and rigidity.

2305.15.2 Anchorage: Rafters and roof trusses shall be anchored to wall framing with approved wind-resisting uplift framing clips of appropriate capacity at each connection.

Renumber Rhode Island section 1702.6.6, to read as follows:

2311.6 Rhode Island: In Rhode Island approved naturally durable or pressure-treated wood shall be used for those portions of wood members which form the structural supports of buildings, balconies, porches or similar permanent building appurtenances when such members are exposed to the weather without adequate protection from a roof, eave, overhang or other covering to prevent moisture or water accumulation on the surface or at joints between members. Such members include, but are not limited to the following.

1. Horizontal members such as girders, joists and decking;

2. Vertical members such as posts, poles and columns; or

3. both horizontal and vertical members.

Renumber Rhode Island section 1704.3, Prefabricated Trusses, to read as follows:

2313.3 Prefabricated trusses: Prefabricated trusses shall be designed to resist all superimposed design loads. The truss fabricator shall submit drawings and calculations indicating all aspects of truss design and installation for approval prior to fabrication or delivery.
Fabricators and users of wood trusses shall be subject to rules and regulations governing such activities as may be promulgated by the Committee.

Renumber Rhode Island Section 1705.0 Native Lumber as follows:

Section 2314.0 Native Lumber

2314.1 Scope:

The provisions of this section shall govern the use of Native Lumber in accordance with GL23-27.3-109.0 of the State Building Code.

Native Lumber is unmarked structural lumber from wood processed in the State of Rhode Island by a mill registered in accordance with provisions of this code.

Such lumber which is not grade marked or certified by a recognized grading organization designated under Section 2303.1.1 shall be classified as an ordinary material and is not required to meet the test requirement of section 1604.3 and shall be permitted for use as follows.

2314.2 Identification and Use:

1. The producing mills shall sell or provide the lumber directly to the ultimate consumer or his contract builder for use in an approved structure;

2. The providing mill shall certify in writing to the consumer or builder on a form to be provided by the State Building Code Standards Committee that the quality and safe working stresses of such lumber are equal to or exceed No. 2 grade in accordance with grading practices established by an approved lumber grading or approved testing agency.

Exception: Load bearing walls shall be of stud grade minimum.

This certification shall be filed with the local building official having jurisdiction as part of the building permit application;

3. Native Lumber shall be limited to the following uses:

   a. One and two-family dwellings not exceeding three stories in height, or:

   b. General building construction types 3B, 4 or 5B not exceeding ten thousand square feet of cumulative floor area or 35 feet in height, but not to exceed 2 stories, or:

   c. Those low stress buildings not intended for human habitation such as barns, sheds, agricultural, detached garages, outbuildings and other accessory structures; or

   d. Non-structural and non-fire rated applications in any use group of Type 3, 4 or 5 construction.

4. uses not permitted: Native lumber shall not be used in engineered plate-truss systems unless such lumber is graded in accordance with Section 2303.1.1.

2314.3 Native Softwoods and Hardwoods

Native hardwood or softwood lumber may be used in post and beam timber type construction per section 1705.6. such uses as beam, girders, headers, and column supports will require engineering evaluation for the allowable design values and duration of loading factors.

Native lumber located near or in contact with the ground shall be naturally durable or pressure-treated in accordance with the provisions of section 2311.2 and 2311.3 inclusive.

2314.4 Sizing Criteria for Native Softwood Lumber

1. Sizing criteria: For lumber sized in accordance with the American Softwood Lumber Standard PS-20-70, values for maximum fiber stress and modulus of elasticity specified in tables 6/7A and 6/7B in Appendix B of SBC-2 shall be used in establishing span and spacing characteristics for all structural members.

2. Stress increases: Lumber which is sized in excess of the dimensions established by the American Softwood Lumber Standard PS-20-70 for the given nominal size referenced shall be allowed to have a maximum fiber stress increase above that provided in Item 1 above in proportion to the increased bearing capacity of the cross-section as provided in Table 1705 or as calculated.

2314.5 Moisture Content

The moisture content for structural framing shall be 19% or less unless the producer indicates that the lumber is surfaced green.

2314.6 Post and Beam Type Structures

Native hardwood and softwood lumber are permitted in post and beam timber-type structures. Design drawings and calculation shall be by a Rhode Island registered architect or engineer and submitted to the building official for approval.

2314.7 Responsibilities

The building official shall indicate the use of native lumber on the building permit application under the heading "Description of work to be performed" and also the name of the mill providing the native lumber.

The building official shall have the right to reject any lumber of questionable quality based on visual observation.

Edit. Note: See also SBC-18 USE OF NATIVE LUMBER
dated February 1, 1993.

TABLE 2314
NATIVE LUMBER ALLOWABLE STRESS

	Actual Lumber Size Closest Size which does not exceed the Dimension Shown		Multiplier Factor Lumber Based on Width	Factor to be Added to Column 3 Factor for Lumber Oversized in Thickness	
Nominal Size	Actual Size Thickness	Width		Thick-ness In-crease of 1/4" to 1/2"	Thick-ness In-crease of over 1/2" to 1"
3 x 8	2-1/2 x	7-1/2	1.0 x Fs	+0.10	+0.20
		x 7-3/4	1.07		
		x 8	1.14		
3 x 10	2-1/2 x	9-1/2	1.0		
		x 9-3/4	1.05	+0.10	+0.20
		x 10	1.11		
3 x 12	2-1/2 x	11-1/2	1.0		
		x 11-3/4	1.04	+0.10	+0.20
		x 12	1.09		
3 x 14	2-1/2 x	13-1/2	1.0		
		x 13-3/4	1.04	+0.10	+0.20
		x 14	1.07		
4 x 10	3-1/2 x	9-1/2	1.0	+0.07	+0.14
		x 9-3/4	1.05		
		x 10	1.11		
4 x 12	3-1/2 x	11-1/2	1.0		
		x 11-3/4	1.04	+0.07	+0.14
		x 12	1.09		
4 x 14	3-1/2 x	13-1/2	1.0		
		x 13-3/4	1.04	+0.07	+0.14
		x 14	1.08		

Notes to Table 2314

Note 1. Notation FS is the allowable maximum fiber stress for the assumed grade as established by this code in Section 2314.2.2 F's ("operating" stress) is the modified allowable maximum fiber stress which may be used in the span tables and for calculating required lumber sizes. F's is found by multiplying Fs by the factors given in the table

Note 2. Table Columns:

Column 1: is the nominal commonly used lumber size.
Column 2: is a list of actual sizes of the supplied lumber.
Column 2 lists the sizes on the basis of a constant thickness and a width increasing by one-quarter (1/4) inch and one half (1/2) inch.
Column 3:gives the multiplier for increasing the assumed allowable stress (Fs) based on the increases in width as listed in Column 2.
Column 4: gives the multiplier for increasing the assumed allowable stress (Fs) based on increases in thickness.

Note 3. Example: Fiber stress for assumed grade = one thousand (1,000) psi – Actual size 3-1/8 x 9-3/4

Nominal size 3 x 10	1. Multiplier factor for Width =	1.05
3-1/8=increase of 5/8" total	2. Multiplier factor for Thickness=	.20
	Sum	1.25

3. Operating stress F's = 1.25 x Fs
F's = 1.25 x 1,000 = 1,250

Therefore, F's = 1,250 psi is used for calculations and in the span tables.

CHAPTER 26
PLASTIC

The following amendment is added to the sections of Chapter 26:

Renumber Rhode Island section 2002.3.10.2, Thickness, to read as follows:

2603.6.2 THICKNESS: The foam plastic shall be limited to a maximum thickness of 4 inches (102mm). Foam plastic used for ornamentation may exceed 4 inches(102mm) when it does not exceed ten (10%) percent of the installed foam plastic area.

CHAPTER 27
ELECTRIC WIRING, EQUIPMENT AND SYSTEMS

The following Rhode Island amendments are made to the sections of Chapter 27.

Renumber Rhode Island section 2700.1 Scope to read as follows:

2701.1 Scope: The provisions of this article shall control the design and construction of all new installations of electrical conductors, equipment and systems in building or structures; and all alterations to existing wiring systems therein to insure safety. All such installations shall conform to Regulation SBC-5 National Electrical Code 1996 edition, dated April 1, 1998.

Revise BOCA Section 2701.2 **EXCEPTIONS**, to read as follows:

2701.2 Exceptions

> Electrical wiring or data, telecommunications, video and sound system installations shall not be installed in a building or structure, nor shall an alteration of an existing electric wiring system be made, until a permit has been issued therefore as required in Section 2703.0, except as provided for in Sections 2701.2.1 through 2701.2.3. As used in this Code a " Public Service Agency" or a "Public Service Companies" is an agency or company that is directly regulated by the Rhode Island Public Utilities Commission. This Exception only applies to the regulated company or agency, it does not apply to any subcontractor.

Amend BOCA Section 2701.4 **ELECTRIC EQUIPMENT STANDARDS**, to read as follows:

2701.4 Electric Equipment Standards:

The materials, appliances and other equipment that have been tested and listed in published reports of inspected electrical equipment by an approved agency, and installed in accordance with all instructions included as part of such listing may be approved as meeting requirements of this code.

Delete Rhode Island amendment 2701.1, General in its entirety.

Amend BOCA Section 2702.1, **GENERAL**, to read as follows:

2702.1 GENERAL:

Except as modified by the authority enforcing this
Code, plans, specifications, schedules and calculations in sufficient detail shall be filed with the authority enforcing this Code, showing the location, and capacity of all lighting facilities, and all electrically operated equipment including power circuits required for all electrical service equipment of the building or structure. Details shall include available fault current at each protective device. Details shall include showing all raceways, gables and or circuiting on plans.

Amend BOCA Section 2702.2, **Items Covered,** to read as follows: (Items 3,5,6,7,8 are not amended).

2702.2 Items Covered:

1. Places of public assembly and education and control of emergency lighting systems in accordance with Section 1024.0 and hazardous occupancies in Chapter 4, and as required by the Rhode Island Fire Safety Code.

2. Stairway and exit illumination in accordance with Chapter 12 and Section 102.4.0; "Exit" sign lighting circuits in accordance with Section 1023.0; elevator car illumination in accordance with Section 3013.0 and as required by the Rhode Island Fire Safety Code.

3. FIRE PROTECTIVE SIGNAL SYSTEMS : Fire alarm signal systems, fire department communications and supervisory service shall be in accordance with the current Rhode Island Fire Safety Code.

Renumber Rhode Island Section 2701.3 OTHER AUTHORITIES, to read as follows:

SECTION 2702.3 OTHER AUTHORITIES: Where required by local law or ordinance, the plans and specifications for electrical wiring shall be approved by the municipal or state authority having jurisdiction.

Add a new Section 2702.4 **CERTIFICATION** to read as follows:

2702.4 Certification:

Except for use group R (residential use) construction documents shall bear the seal of a Registered Professional Engineer who shall provide the services as required by 23-27.3-128.2.2, except as modified by the authority enforcing this Code.

Amend BOCA Section 2703.1 **GENERAL,** to read as follows
and delete Rhode Island section 2704.1, General, in its entirety:

2703.1 General:

Electrical wiring, data communications, video and sound installations, or equipment shall not be installed within or on any building, structure or premises, nor shall any alteration be made in any such existing installation, without first securing approval and a permit from the code official except as provided for in Section 2703.2. It shall be unlawful to use or allow the use of, or to supply current for, an electrical system in a building or structure or allow the use of, or to supply current for data telecommunications, video or sound installations unless the required certificate of inspection and permit have been issued by the code official.

Amend BOCA section 2703.2.2 **PUBLIC SERVICE AGENCIES** to read as follows:

2703.2.2 Public Service Agencies:

A permit shall not be required for the installation, alteration or repair of electrical equipment for the operation of communications and signals or the transmission of intelligence by wire by public service agencies, except as provided for, in Chapter 9 and the Rhode Island Fire Safety Code for fire alarm systems. This paragraph applies to their function as a utility only.

Amend BOCA Section 2703.2.3 **POWER COMPANIES,** to read as follows:

2703.2.3 Power Companies:

A permit shall not be required for the installation, alteration or repair of electrical equipment of a power or public service company that is a public utility for its use in the generation, transmission, distribution or metering of electricity.

Add the following section to BOCA Section 2704.0

INSPECTION AND TEST.

2704.4 Re-Inspection:

An electrical installation from which an electrical service has been discontinued for a period of thirty (30) days or more shall not have service restored until the system has been re-inspected and a new certificate of inspection issued.

EXCEPTION:

Re-inspection of dwelling units shall only be required if the electrical service has been discontinued for a period of one year.

Delete Rhode Island section 2704.2.2 Public Service agencies, in its entirety.

Amend the following BOCA sections by changing the referenced electrical code from "NFPA 70 listed in Chapter 35" to " Regulation SBC-5", National Electrical Code, 1996 edition dated April 1, 1998.

Section 2705.1 Permission
Section 2706.1 General
Section 2707.1 General
Section 2708.3 Additional loads

Amend Rhode Island Section 515.0 Housing for the Elderly by renumbering as follows:

Section 2709.0 HOUSING FOR THE ELDERLY

2709.1 Independent Electrical Generating System:

All new construction or substantial rehabilitation of housing for the elderly shall contain an independent generating system for electrical power meeting the requirements of this Code, which shall be sufficient to maintain the operation of the housing for the elderly for a period of at least forty-eight hours in the event of a disruption of electrical power, including the following items:

1. Emergency lighting meeting the requirements of Chapter 23-28.24 of the General Laws.

2. Automatic fire alarm system meeting the requirements of Chapter 23-28 of the General Laws.

3.Heating system, including boilers, pumps and controls for all dwelling units and common areas meeting the requirements of Article 16 of this Code.

Exception:

A) Electric heating within dwelling units is not required to be connected to the emergency generator.

4. At least one elevator if the structure is equipped with elevators.

5. Kitchen equipment including refrigeration, cooking, ventilation and other equipment required by the Code in all community areas; and

6. Artificial lighting, heat and ventilation in all community areas.

CHAPTER 28
MECHANICAL SYSTEMS

The following Rhode Island amendments are made to the sections of Chapter 28:

Delete Rhode Island Section 2500.2, Mechanical Code, in its entirety.

Amend the following BOCA sections by changing the referenced Mechanical Code from "The Mechanical Code listed in Chapter 35". To "Regulation SBC-4, International Mechanical Code , 1996 edition, dated April 1, 1998":

Section 2801.2	Mechanical Code
Section 2802.1	General
Section 2802.3	Details
Section 2804.1	Inspections
Section 2805.2.3	Ducts
Section 2805.2.4	Duct Coverings
Section 2805.2.5	Electrical wiring, optical fiber cables and optical fiber raceways.
Section 2808.3	Locations
Section 2809.1	Unsafe Orders

CHAPTER 29
PLUMBING SYSTEMS

The following Rhode Island amendments are made to the sections of Chapter 29:

Delete Rhode Island amendments to existing Article 28 in their entirety.

Amend the following BOCA sections by changing the referenced Plumbing Code from the "Plumbing Code referenced in Chapter 35", to "Regulation SBC-3, International Plumbing Code, 1995 edition, dated April 1, 1998".

Section 2901.1	Scope
Section 2902.3	Exceptions
Section 2904.3	Certificate of Approval
Section 2905.4.2	Connections to automatic fire sprinkler systems and standpipe systems.
Section 2908.1	Compliance with Code.
Section 2908.2	Existing drainage nuisances

Amend BOCA Section **2905.3 ,PRIVATE WATER SUPPLY,** AS FOLLOWS:

2905.3 PRIVATE WATER SUPPLY: When a public water supply is not available, a private well may be developed as a source of drinking water, provided water samples are submitted to the Department of Health or a state certified water testing laboratory for an analysis and the results of such analysis is satisfactory. The scope of the analysis may be specified by the Building Official. When the possibility of ground water pollution is suspected, the Building Official may require additional approval by the Department of Environmental Management. The cost of all testing and fees shall be borne by the applicant.

Amend BOCA Section **2906.1, GENERAL,** AS FOLLOWS:

2906.1 GENERAL: Private sewage disposal systems shall conform to the Individual Sewage Disposal System Regulations as promulgated by the Rhode Island Department of Environmental Management.

CHAPTER 30
ELEVATORS AND CONVEYING SYSTEMS

The following Rhode Island amendments are made to the Sections of Chapter 30:

Delete the Rhode Island amendments to existing Article 28, in their entirety.

Amend BOCA Section 3001.1, SCOPE, to read as follows:

3001.1 SCOPE: Except as may otherwise be provided by statute, the provisions of this chapter shall control the design, construction and installation of all special hoisting and conveying equipment hereafter installed, relocated or altered in all buildings or structures. The design, construction, installation, maintenance, relocation and operation of all elevators, dumbwaiters, moving stairways, moving walks, and certain elevating devices used to handle materials only, shall be subject to the rules and regulations adopted and enforced by the Rhode Island Department of Labor and Training, Division of Occupational Safety, Elevator Unit. Portable elevating devices not covered by this chapter or by the Department of Labor, shall be constructed, operated and maintained in compliance with accepted engineering practice.

Amend BOCA Section 3003.2, PERMITS, to read as follows:

3003.2 PERMITS: Permits for the installation of elevators, dumb waiters, moving stairways, moving walks, and certain elevating devices used to transport materials and personnel shall be issued only by the Department of Labor and Training, Division of Occupational Safety, Elevator Unit.

DELETE THE FOLLOWING BOCA SECTIONS IN THEIR ENTIRETY:

Section 3003.3 Identification of equipment
Section 3004.0 TESTS AND INSPECTIONS
Section 3005.0 CERTIFICATE OF COMPLIANCE
Section 3006.1 Designated operator

Amend BOCA Section 3006.3, Accessible elevators, to read as follows:

3006.3 Accessible elevators: All passenger elevators shall comply with SBC-14, SBC-15 or SBC-16 listed in Chapter 35.

Renumber Rhode Island Section 2607.1.4 as follows:

Section 3007.1.4 Buildings with Elevator Service: In all buildings and structures serviced by an elevator, at least one elevator, which services all floors, shall be provided with a minimum clear distance between walls, or between wall and door excluding return panels, of not less than 80 inches by 54 inches (172.7 cm by 137.2 cm) and a minimum distance from wall to return panel of not less than 51 inches (129.5 cm), with a 42 inch (106.7 cm) side-slide door to allow for turning a wheelchair or accommodating an ambulance stretcher in its horizontal position.

Add Section 3007.3.1, Machine room venting, to read as follows:

3007.3.1 Machine room venting: All elevator machine rooms shall be vented to the outside air and shall maintain an ambient air temperature of not less than 50 F and not more than 100 F at any given time.

Delete BOCA Sections 3012.3, 3012.4, 3012.5 and 3013.0 in their entirety and refer to the rules and regulations promulgated by the Department of Labor and Training, Division of Occupational Safety, Elevator Unit.

CHAPTER 31
SPECIAL CONSTRUCTION

The following Rhode Island amendments are made to the Sections of Chapter 31:
Delete BOCA Sections 3104.1, 3104.1.1 and 3104.6 and renumber the Rhode Island amendments to Sections 624.1, 624.1.1 and 624.6 as follows:

Section 3104.0 Tents and other temporary membrane structures.

3104.1 General: The provisions of this section shall apply to tents and other temporary membrane structures, erected for a period of less than 90 days. Those erected for a longer period of time shall comply with 604.0 or all applicable sections of this code when section 604.0 is not applicable.

Exception:

See Section 3111.0, Other Temporary Structures.

3104.1.1 Permit required: The building official may require a permit for all such installations of temporary structures including tents or membrane structures covering an area in excess of 120 square feet (11.16m2) including all connecting areas or spaces with a common means of egress or entrance and used or intended to be used for gathering together of ten or more persons. Tents used exclusively for recreational camping purposes shall be exempt from the above requirements. Special permits required by the building code shall be secured from the code official.

3104.6 Certification: An affidavit or affirmation shall be submitted to the code official and a copy retained on the premises on which the tent or air-supported structure is located, attesting to the following information relative to the flame resistance of the fabric.

1. The names and addresses of the owners of the tent or air-supported structure.
2. Date fabric was last treated with flame resistant solution.
3. Trade name or kind of chemical used in treatment.
4. The name or person of firm treating the material.
5. Name of testing agency and test standard by which the fabric was tested.

With regards to items 2 through 5, no such certificate shall be acceptable if more than three years old, unless the certificate indicates specifically that the treatment has a longer lifespan.

Delete Regulation SBC 8-1992, Construction in Flood Hazard Areas, and amend BOCA Section 3107.0 in its entirety as follows:

SECTION 3107.0 FLOOD-RESISTANT CONSTRUCTION

3107.1 General: All buildings and structures erected in areas prone to flooding shall be constructed and elevated as required by the provisions of this section.

ADMINISTRATION

3107.1.1 DUTIES AND RESPONSIBILITIES OF THE BUILDING OFFICIAL: Duties of the Building Official shall include but not be limited to:

(A) Permit Review

(1) Review all building permits to determine that the requirements herein have been satisfied.

(2) Review all building permits to require that all necessary permits have been obtained from those federal, state or local government agencies from which prior approval is required.

(B) Use of other Base Flood Data

In the absence of base flood elevation data provided by the Federal Insurance Administration, the Building Official shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source in order to administer the following requirements.

(C) Information to be obtained and maintained for all new or substantially improved elevated structures:

(1) Verify and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures.
   (i) verify and record the actual elevation (in relation to mean sea level) and
   (ii) maintain the elevated certifications required in Section **3107.12.1.**

(2) For all new or substantially improved flood-proofed structures:
   (i) verify and record the actual elevation (in relation to mean sea level) and
   (ii) maintain the flood proofing certifications required in Section **3107.12.2.**

(3) Obtain the certifications from the registered architect or licensed engineer required for the anchorage of the structure and the design of breakaway walls required in section **3107.12.3.**

(4) Maintain for public inspections all records pertaining to these rules and regulations.

(D) Interpretation of Map Boundaries.

The Building Official shall make interpretations where needed, as to the exact location of the boundaries of the area of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation (see Variances and Appeals).

Add the following Section 3107.1.2

3107.1.2 DEFINITION
For the purpose of this section the following terms, phrases, words and their derivations shall have the meaning given herein. When not inconsistent with the context hereof, words used in the present tense shall include the future; words used in the singular shall include the plural.

APPEAL: Means a request for a review of the Building Official's interpretation of any provision of these regulations or a request for a variance.

AREA OF SHALLOW FLOODING: Means a designated AO or VO Zone on a community's Flood Insurance Rate Map (Firm) with base flood depths from one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident.

BASEMENT: That portion of a building which is partly or completely below grade. (Ref: Section 502.1)

BASE FLOOD: Means the flood having one percent change of being equaled or exceeded in any given year (also known as the 100 year flood).

BREAKAWAY WALL: Means any type of wall, whether solid or lattice and whether constructed of concrete, masonry, wood, metal, plastic, or any other suitable building material which is not part of the structural support of the building and which is so designated to break way, under abnormally high tides or wave actions, without damage to the structural integrity of the building on which they are used or any buildings to which they might be carried.

FEDERAL INSURANCE ADMINISTRATION: The agency that administers the National Flood Insurance Program.

(3107.1.2 Definitions Continued)

FLOOD OR FLOODING;
(a) A general and temporary condition of partial or complete inundation of normally dry land areas from:

1. The overflow of inland or tidal waters.
2. The unusual and rapid accumulation or runoff of surface waters from any source.
3. Mudslides(i.e. mudflows) which are proximately caused or precipitated by accumulation of water on or under the ground.

(b) The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as a flash flood or an abnormal tide surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in (a) (1) above.

FLOOD HAZARD BOUNDARY MAPS (FHBM): An official map of a community, issued by the Federal Insurance Administration, where the boundaries of the flood, mudslide (i.e. mudflow) related erosion areas having special hazards have been designated as Zone A, M, and/or E.

FLOOD INSURANCE RATE MAP (FIRM): An official map of a community on which the Federal Insurance Administration has delineated both the special flood hazard areas and the risk premium zones applicable to the community.

FLOOD INSURANCE STUDY: Means the official report in which the Federal Insurance Administration has provided flood profiles as well as the Flood Boundary and Floodway Map and the water surface elevation of the base flood.

FLOOD-PROOFING: Means construction methods and materials adequate to withstand the flood depths, pressures, velocities, impact and uplift forces and other factors associated with the base flood. Additionally, below the base flood level the structure is to be watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

FUNCTIONALLY DEPENDENT USE: Means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, but does not include long term storage or related manufacturing facilities.

LOWEST FLOOR: Means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access, or storage in an area other than a basement area is not considered a buildings lowest floor; provided that such enclosure is not built as to render the structure in violation of the applicable non-elevated design requirements.

MANUFACTURED HOME: Means a structure, transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term manufactured home also applies to park trailers, travel trailers, and other similar vehicles place on a site for more than 180 consecutive days, and not fully licensed and ready for highway use.

MEAN SEA LEVEL: Means the average height of the sea for all stage of tide.

NEW CONSTRUCTION: Means structures for which the "start of construction" commenced on or after the effective date of these regulations, and includes any subsequent improvements to said structures.

PHYSICAL VALUE: See definition in section 23-27.3-106.5 of the Rhode Island State Building Code and definition of substantial improvement.

START OF CONSTRUCTION: For other than new construction or substantial improvements under the Coastal Barriers Resources Act (Public Law 97-348) start of construction includes substantial improvements, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slabs or footings, the installation of piles, the construction of columns, or any work beyond the state of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

STRUCTURE: A walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.

SUBSTANTIAL DAMAGE: Means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value referenced in section 23-27.3-106.5 of the structure before the damage occurred.

SUBSTANTIAL IMPROVEMENT: Means any reconstruction rehabilitation, addition or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value referenced in section 23-27.3-106.5 of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage" regardless of the actual repair work performed. For the purpose of the definition "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor or other structural part of the building commences, whether or not that alteration affects the dimensions of the structure. The term does not however, include either (1) any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions or (2) any alterations of a structure listed on the National Register or Historic Place or a State Inventory of Historic Places.

VARIANCE: Means a grant of relief by a community from the terms of these rules and regulations.

Amend BOCA Section 3107.2 as follows:

3107.2 Base flood elevation: The base flood elevation shall be used to define areas prone to flooding, and shall describe, at a minimum, the depth or peak elevation of flooding (including wave height) which has a 1 percent (100-year flood) or greater chance of occurring in any given year.

3107.2.1 Elevation data sources: In identifying areas prone to flooding, the governing body having jurisdiction shall utilize the most current flood elevation data available and such areas shall be identified accordingly on an official flood hazard map.

Note: The most recent Flood Insurance Rate Map published by the Federal Emergency Management Agency shall be considered in establishing the official flood hazard map.

Amend Section 3107.4 as follows:

3107.4 Flood-hazard zones (A Zones A0, A1-30 and AE): All areas which have been determined to be prone to flooding but not subject to high-velocity waters or wave action shall be designated as flood-hazard zones. All buildings and structures erected in flood-hazard zones shall be designed and constructed in accordance with Sections 3107.4.1 through 3107.4.4.

3107.4.1 Elevation: All buildings or structures erected within a flood-hazard zone shall be elevated so that the lowest floor is located at or above the base flood elevation. All basement floor surfaces shall be located at or above the base flood elevations.

Exceptions

1. Floors usable for human occupancy below the base flood elevation in occupancies in any use group other than Use Group R shall conform to Sections 3107.4.4.
2. Floors of occupancies in any use group which are utilized solely for structure means of egress, incidental storage garages and parking, and which are located below the base flood elevation, shall conform to Section 3107.4.3.

3107.4.2 Anchorage: The structural systems of all buildings or structures shall be designed, connected and anchored to resist flotation, collapse or permanent lateral movement due to structural loads and stresses from flooding equal to the base flood elevation and shall be designed in accordance with Sections 1612.2 and 1612.3.

3107.4.3 Enclosures below base flood elevation: Enclosed spaces below the base flood elevation shall not be used for human occupancy with the exception of structure means of egress, entrance foyers, stairways, vehicle parking and incidental storage. Fully enclosed spaces shall be designed to equalize automatically hydrostatic forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement shall either be certified by a registered design professional in accordance with Section 3107.12 or conform to the following minimum criterion: a minimum of two openings having a total net area of not less than 1 square inch ($645mm^2$) for every 1 square foot ($0.1m^2$) of enclosed area subject to flooding shall be provided. The bottom of all openings shall not be higher than 12 inches (305mm) above grade. Openings shall not be equipped with screens, louvers, valves or other coverings or devices unless such devices permit the automatic entry and discharge of floodwaters.

3107.4.4 Water-resistant construction: Occupancies in any use group other than Use Group R shall, in lieu of meeting the elevation provisions of Section 3107.4.1, be erected with floors usable for human occupancy below the base flood elevation provided that the following conditions are met:

1. All space below the base flood elevation shall be constructed with walls and floors that are substantially impermeable to the passage of water.

2. All structural components subject to hydrostatic and hydrodynamic loads and stresses during the occurrence of flooding to the base flood elevation shall be capable of resisting such forces, including the effects of buoyancy.

3. All openings below the base flood elevation shall be provided with water-tight closures and shall have adequate structural capacity to support all flood loads acting upon the closure surfaces.

4. All floor and wall penetrations for plumbing, mechanical and electrical systems shall be made water tight to prevent floodwater seepage through spaces between the penetration and wall construction materials. Sanitary sewer and storm drainage systems that have openings below the base flood elevation shall be provided with shutoff valves or closure devices to prevent backwater flow during conditions of flooding.

Amend BOCA 3107.5 as follows:

3107.5 High-hazard zones (V Zones V1-30 and VE): Areas of tidal influence which have been determined to be subject to wave heights in excess of 3 feet (914 mm) or subject to high-velocity wave run-up or wave-induced erosion shall be classified as high-hazard zones. All buildings or structures erected in a high-hazard zone shall be designed and constructed in accordance with Sections 3107.5.1 through 3107.5.3.

Note: Areas shown as V Zones on the most recent Flood Insurance Rate Map published by the Federal Emergency Management Agency shall be considered in establishing high hazard zones.

3107.5.1 Elevation: All buildings or structures erected within a high-hazard zone shall be elevated so that the lowest portion of all structural members supporting the lowest floor, with the exception of mat or raft foundations, piling, pile caps, columns, grade beams and bracing, is located at or above the base flood elevation.

3107.5.2 Enclosures below base flood elevation: All spaces below the base flood elevation in a high-hazard zone shall not be used for human occupancy and shall be free of obstruction except as permitted herein:

1. Mat or raft foundations, piling, pile caps, bracing, grade beams and columns which provide structural support for the building.
2. Entrances and exits which are necessary for required ingress and means of egress.
3. Incidental storage of portable or mobile items readily moved in the event of a storm.
4. Walls and partitions are permitted to enclose all or part of the space below the elevated floor, provided that such walls and partitions are not part of the structural support of the building and are constructed with insect screening, open wood lattice, or non-supporting walls designed to break away or collapse without causing collapse, displacement or other structural damage to the elevated portion of the building or supporting foundation system due to the effect of wind loads as specified in Section 1609.0 and water loads as specified in Section 1612.0 acting simultaneously. Any such non-supporting solid wall shall be certified as specified in Section 3107.12.3.

3107.5.3 Foundations: All buildings or structures erected in high-hazard zones shall be supported on pilings or columns and shall be adequately anchored to such pilings or columns. The piling shall adequate soil penetrations to resist the combined wave and wind loads (lateral and uplift) to which such piles are likely to be subjected during a flood to the base flood elevation. Pile embedment shall include consideration of decreased resistance capacity caused by scour of soil strata surrounding the pile. Pile system design and installation shall also be made in accordance with the provisions of Sections 1816.0 and 1817.0. Mat or raft foundations which support columns shall not be permitted where soil investigations required in accordance with Section 1802.1 indicate that soil material under the mat or raft is subject to scour or erosion from wave-velocity flow conditions.

Note: The use of fill for structural support of buildings is prohibited in all high hazard areas.

3107.6 Protection of mechanical and electrical systems: New and replacement electrical equipment and heating, ventilating, air conditioning and other service equipment shall be either placed above the base flood elevation or protected so as to prevent water from entering or accumulating within the system components during floods up to base flood elevation in accordance with the mechanical code listed in Chapter 35. Installation of electrical wiring and outlets, switches, junction boxes and panels below the base flood elevation shall conform to the provisions of NFPA 70 listed in Chapter 35 for location of such items in wet locations. Duct insulation subject to water damage shall not be installed below the base flood elevation.

3107.7 Construction materials, methods and practices: All buildings or structures erected in flood-hazard zones (A Zones) or in high-hazard zones (V Zones) shall be constructed with materials resistant to flood damage and be constructed by methods and practices that minimize flood damage. Construction materials shall be resistant to water damage in accordance with the provisions of Sections 1808.0, 1810.2, 1813.4, 2307.2, 2309.1, 2311.4, 2311.6 and 2503.4.

Delete BOCA 3107.8 Mobile Units and substitute the following:

3107.8 Mobile units: New or replacement mobile units to be located in any hazard zone shall be placed in accordance with the applicable elevation requirements of Sections 3107.4.1 and 3107.5.1 and the anchor and tie down requirements of Section 420.3.1.

3107.8 Manufactured Homes: All manufactured homes to be placed or substantially improved within zones A1-30, AH and AE on the community's FIRM be elevated on a permanent foundation such that the lowest floor of the manufactured home is at or above the base flood level elevation: and be securely anchored to an adequately anchored foundation system in accordance with Section 400.1 (A) (2). (Ref. BOCA 1993 3107.8).

3107.9 Water supply and sanitary sewage systems: New and replacement water supply systems shall be designed to minimize infiltration of floodwaters into the systems in accordance with the provisions of the plumbing code listed in Chapter 35. New and replacement sanitary sewage systems shall be designed to minimize infiltration of floodwaters into the systems and discharges from the systems into floodwaters in accordance with the provisions of the plumbing code listed in Chapter 35.

Amend 3107.10 as follows:

3107.10 Alterations and repairs: Alterations and repairs to buildings located in any hazard zone shall require code compliance with Sections 23-27.3-120.0 and 3404.0 except that in the case of damages or cost of reconstruction or restoration in excess of 50 percent of the market value of the building, exclusive of foundations, such structure shall comply in all respects with the requirements of this section.

3107.11 Increases in building height and floor area: Any increases in height or floor area of a building in any hazard zone shall be in accordance with Section 3403.0.

3107.12 Certifications: Certifications shall be submitted in accordance with Sections 3107.12.1 through 3107.12.3.

3107.12.1 As-built elevation certifications: A licensed land surveyor or registered design professional shall certify the actual elevation (in relation to mean sea level) of the lowest structural member required to be elevated by the provisions of this section.

3107.12.2 Water-resistant construction: Where buildings or structures are to be constructed in accordance with Section 3107.4.4, the code official shall require that a registered design professional provide construction documents showing details of floor, wall and foundation support components, loading computations and other essential technical data used in meeting the conditions of Section 3107.4.4. The construction documents shall be accompanied by a statement bearing the signature of the registered design professional indicating that the design and proposed methods of construction are in accordance with all applicable provisions of Section 3107.4.4.

3107.12.3 High-hazard construction: Where buildings or structures are to be constructed in accordance with Section 3107.5, the code official shall require that a registered design professional provide construction documents showing details of foundation support and connection components which are used in meeting the requirements of Section 3107.5.3. Where solid walls or partitions are proposed below the base flood elevations, wall, framing and connection details of such walls shall be provided, including loading computations for the wall and foundation system used in meeting the conditions of Section 3107.5.2.

The construction documents shall be accompanied by a statement bearing the signature of the registered design professional indicating that the design and proposed methods of construction are in accordance with all applicable provisions of Section 3107.5.

Add the following sections:

3107.13 Use Group R: In AO Zones, occupancies in Use Group R shall have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the community's FIRM (at least two feet if no depth number is specified).

3107.14 Residential Construction (AO Zones): In AO Zones, occupancies in any use group other than Use Group R shall either (a) have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the community's FIRM (at least two feet if no depth number is specified), or (b) together with attendant utility and sanitary facilities be completely flood proofed to that level to meet the flood proofing standard of Section 3107.4.4.

3107.15 VARIANCES AND APPEALS

3107.15.1 REQUIREMENTS AND PROCEDURES FOR VARIANCES:

The Board of Appeals after examining the applicant's hardships shall approve or disapprove a variance request and shall hear and decide appeals from the requirements of these regulations, in accordance with the procedures of Section 23-27.3-127.0 of the Rhode Island State Building Code and following:

(A) Board of Appeals

The local Board of Appeals shall hear and decide appeals when it is alleged there is an error in any requirement, decision or determination made by the Building Official in the enforcement or administration of these regulations.

(B) Conditions of Acceptance

(1) Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of the State Inventory of Historic Places, without regard to the procedures set forth in the remainder of this Chapter.

(2) Variances may be issued for new construction and substantial improvements to be erected on a lot of one half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level in conformance with the procedures of paragraphs B (3) (4) (5) and (6) of this Chapter.

(3) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

(4) Variances shall only be issued upon (1) a showing of good and sufficient cause, (2) a determination that failure to grant the variance would result in exceptional hardship to the applicant, and (3) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public or conflict with existing local laws or ordinances.

(5) Any applicant to whom a variance is granted shall be given a written notice from the Board of Appeals that the structure will be permitted to be built with a lowest floor elevation X feet below the base flood elevation.

(6) The Board of Appeals shall notify the applicant in writing (over the signature of the Chairman of the Board) that (i) the issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance up to amounts as high as $25 for $100 of insurance coverage and (ii) such construction below the base flood level increases risks to life and property. Such notification shall be maintained with a record of all variances actions, including justification for their issuance. All such variances issued shall be reported in the community's Annual Report to the Federal Insurance Administration.

(7) Variances shall not be issued by a community within any designated regulatory floodway, if any increase in flood levels during the base discharge would result. (For communities which must meet the requirements of Section 60.3 (d) of the National Flood Insurance Program regulations).

(8) Upon receipt of an application for a variance the Chairman of the Board of Appeals shall forward a copy of said application to the Department of Administration, Office of Rhode Island Division of Planning.

Amend BOCA Section 3108.0, Radio and Television Towers, to read as follows:

Section 3108.0, Radio, Communication and Television Towers.

Amend BOCA Section 3109.0, Radio, and Television Antennas, to read as follows:

Section 3109.0, Radio, Communication and Television Antennas.

Renumber Rhode Island Section 511.0, Temporary Structures, to read as follows:

Section 3111.0 Other Temporary Structures, and retain the existing Rhode Island provisions:

SECTION 3111.0 TEMPORARY STRUCTURES

3111.0 General: Pursuant to a variance granted by the Board of Appeals under the provisions of Section 127.0 the building official may issue a permit for temporary construction as approved by the Board of Appeal. Such permits shall be limited as to time of service but such temporary construction shall not be permitted for more than one (1) year.

The building official may issue permits for temporary construction limited to buildings of less than four hundred (400) square feet and all construction trailers. Such permits shall be limited as to time of service but no such construction shall be permitted to remain in place for more than one (1) year or the time scheduled for the construction project.

3111.2 Special Approval: All temporary construction, when intended to be occupied by the owner, employee, or general public shall conform to structural strength, fire safety, means of egress, light, ventilation and sanitary requirements of the Code necessary to insure the public health, safety and general welfare.

3111.3 Termination of Approval: The building official is hereby authorized to terminate such special approval and to order demolition of any such construction at his discretion.

3111.4 Location: Any temporary structure located within the fire limits shall have exterior fire resistant ratings in accordance with Table 501 of this Code.

CHAPTER 33
SITE WORK, DEMOLITION AND CONSTRUCTION

The following Rhode Island amendments are made to the sections of Chapter 33:

Delete Rhode Island Sections 3000.1,Scope, and 3003.2, Failure to Comply with Orders, in their entirety.

Renumber Rhode Island Section 3008.3 Final grading as follows:

3308.2 Final grading: Lots shall be graded so that surface accumulation of water does not occur across adjoining property. Retaining walls, which may be necessary to prevent surface run-off into adjoining property, shall be constructed in accordance with this code and any applicable ordinances. Storm drainage systems necessary to divert flows from adjoining property shall be designed and installed in accordance with SBC-3 **International Plumbing Code 1995 edition,** dated March 1, 1998.

Renumber Rhode Island Section 3005.4.1 Structural loads as follows:

3308.3 Structural loads: When a new building is to be constructed or an existing building extended to a greater height than an existing adjoining building, a determination of structural integrity of the roof of the adjoining building shall be made regarding the snow loads in accordance with Section 1608.0 SNOW LOADS. The person intending to cause the construction or building height extension shall deliver written notice of intent to the owner of the potentially affected building. The notice shall request license to enter the potentially affected building to inspect and determine the existing building's capacity to sustain additional imposed snow drift load. The person causing such construction shall be liable and shall at their own expense preserve, protect and, if necessary, reconstruct those portions of the adjacent building affected by this construction. If the owner of the adjacent building refuses to allow inspection, protection or reconstruction as may be required, the person causing such new construction or building height extension shall notify, in writing,

both the Building Official and the owner of the adjacent property. Such notification shall identify that the responsibility of providing inspection, protection or reconstruction to the adjacent building has become the exclusive responsibility of the owner of the adjacent property.

Change in **Section 3309.2** the reference to "MECHANICAL CODE listed in Chapter 35" to **"Regulation SBC-4 INTERNATIONAL MECHANICAL CODE 1996 edition dated April 1, 1998".**

CHAPTER 34
EXISTING STRUCTURES

The following Rhode Island amendments are made to the sections of Chapter 34:

Chapter 34 is herein adopted as an alternative for existing building compliance to the provisions of the code and section 23-27.3-106.0.

Delete BOCA Section 3402.8, Lead Paint, and BOCA Section 3402.9, Elevators and Escalators, in their entirety.

Delete BOCA Section 3406.0, Historic Structures, and renumber the existing Rhode Island provision as follows:

SECTION 3406.0 SPECIAL HISTORIC BUILDINGS AND DISTRICTS

3406.1 Approval: The provisions of this code relating to the construction, repair, alteration, enlargement, restoration and moving of buildings or structures shall not be mandatory for existing buildings or structures identified and classified by the state or local government authority as historic buildings, subject to the approval of the Board of Appeals, when such buildings are judged by the code official to be safe and in the interest of public health, safety and welfare regarding any proposed construction, alteration, repair, enlargement and relocation. All such approvals shall be based on the applicant's complete submission of professional architectural and engineering plans and specifications bearing the professional seal of the designer.

Delete paragraph 1 of BOCA Section 3408.2, Applicability, as follows:

3408.2 Applicability: The provisions in Sections 3408.2.1 through 3408.2.5 shall apply to existing occupancies that will continue to be, or are proposed to be, in Use groups A, B, E, F, M, R and S. These provisions shall not apply to buildings with occupancies in Use Group H or I.

Delete BOCA Section 3408.2.5, Accessibility Requirements, and substitute as follows:

3408.2.5 Accessibility requirements: Altered elements of buildings proposed for change of use, alterations or repairs shall conform to accessibility provisions of SBC 14, 15 and 16.

CHAPTER 35
REFERENCED STANDARDS

The following Rhode Island regulation is added to the Standards of Chapter 35:

Rhode Island Department of Health Rules and Regulations for Radon Control – (R23-61-RC) dated August, 1994.

Buildings Requiring Radon Testing. The following public and high priority buildings must be tested for radon or radon progeny using the procedures and protocols contained in this section:

(a) Any building owned, managed, leased, furnished or occupied by a state or municipal agency, commission, or public school.

(b) All public, private, and parochial school buildings or school sites housing students in kindergarten through grade twelve.

(c) Child care facilities.

STATE BUILDING CODE REGULATION – 1998

The following list includes all regulations promulgated by the State Building Code Standards Committee. All regulations are available for a fee at the State Building Commission.

1.	Building Code	SBC-1
2.	One and Two Dwelling Family Dwelling Code	SBC-2
3.	Plumbing Code	SBC-3
4.	Mechanical Code	SBC-4
5.	Electrical Code	SBC-5
6.	Manufactured Buildings and Building Components	SBC-6
7.	ANSI A225.1 Manufactured Home Installation Standard	SBC-7
8.	State Energy Code	SBC-8
9.	Enforcement and Implementation Procedures for Projects Under the Jurisdiction of the State of Rhode Island	SBC-9
10.	Code Interpretations	SBC-10
11.	Certification of Building Officials, Building, Electrical, Plumbing and Mechanical Inspectors	SBC-11
12.	New Materials and Methods of Construction	SBC-12
13.	State Building Code For Existing Schools	SBC-13
14.	Accessibility for Individuals with Disabilities for Residential Use Groups R-2 and R-3	SBC-14
15.	Accessibility for Individuals with Disabilities in State and Local Government Facilities	SBC-15
16.	Accessibility for Individuals with Disabilities	SBC-16
17.	Public Buildings Accessibility Meeting Standards	SBC-17
18.	Native Lumber	SBC-18